

1N60 THRU 1N60P
SMALLE SIGNAL SCHOTTKY RECTIFIERS

FEATURES:

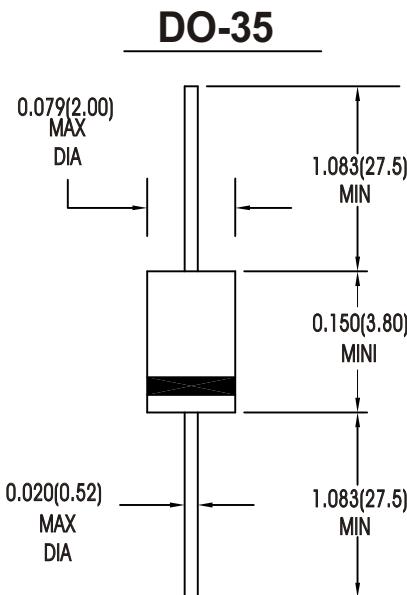
- Metal-on-silicon junction, majority carrier conduction
- High current capability, low forward voltage drop
- Ultra speed switching characteristics
- Extremely low reverse current IR
- Satisfactory wave detection efficiency
- Small temperature coefficient of forward characteristics
- For use in Recorder/TV/RADIO/TELEPHONE as detectors, high speed switching circuits, small current rectifier

MECHANICAL DATA

Case: DO-35 glass case

Polarity: color band denotes cathode end

Weight: Approx 0.13 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	1N60	1N60P	Units
Repetitive peak reverse voltage	V _{RRM}	20	30	Volts
Forward current at Ta=25°C	I _O	30	50	mA
Peak forward surge current, t=1s	I _{FSM}	150	400	mA
Maximum instantaneous forward voltage drop at IF=1.0mA	V _F	0.50	0.50	Volts
IF=30mA		1.0		
IF=200mA			1.0	
Maximum reverse current At VR=15V 25°C	I _R	5.0	10	μA
Typical junction capacitance (Note 1)	C _F	4.0	10	pF
Typical Efficiency(See diagram 4) (Note 2)	η		60	%
Maximum reverse Recovery time (Note 3)	T _{RR}		1.0	ns
Typical Junction Ambient Thermal Resistance	R _{θJT}		400	°C/W
Operating temperature range	T _J		-65 to +125	°C
Storage temperature range	T _{stg}		-65 to +125	°C

Note : 1. VR=1V, f=1MHZ For 1N60, VR=10V, f=1MHZ For 1N60P

2. V_I =3V, f=300MHZ, C_L=10pF, R_L = 3.8KΩ

3. I = I = 1mA, T_{rr} = 1mA, R_c = 100Ω

RATING AND CHARACTERISTIC CURVES 1N60

FIG.1-FORWARD CURRENT

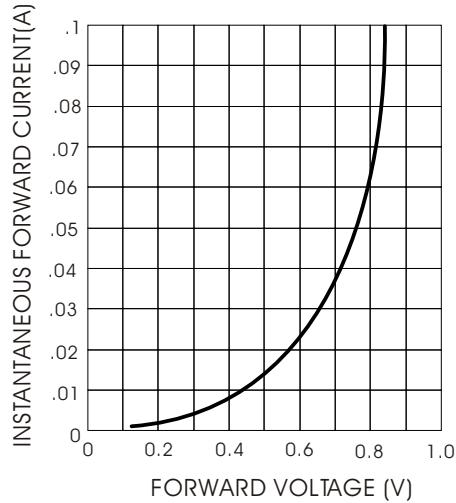


FIG.2-REVERSE CURRENT

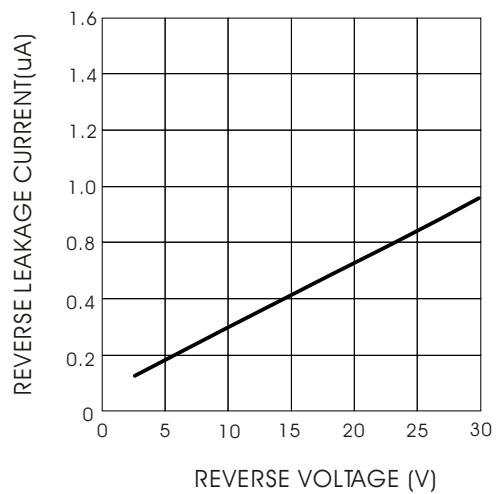


FIG.3-JUNCTION CAPACITANCE

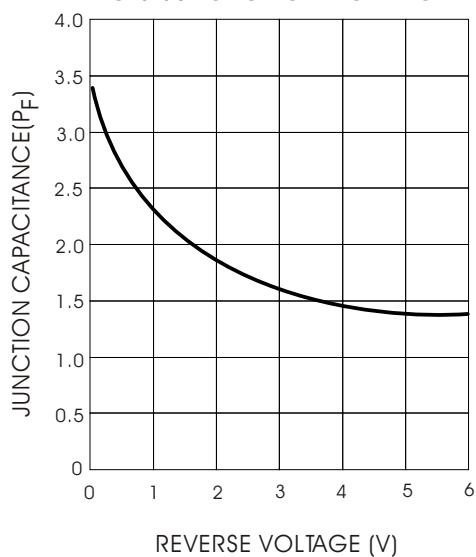


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT

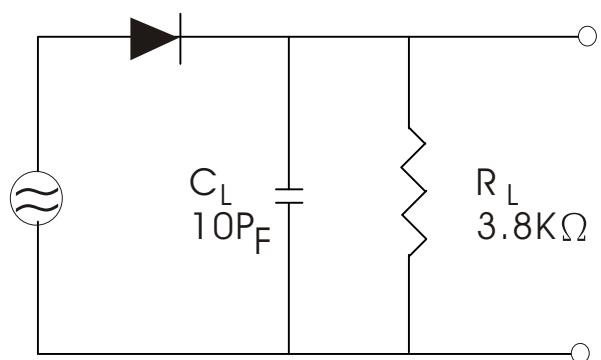


FIG.1-FORWARD CURRENT

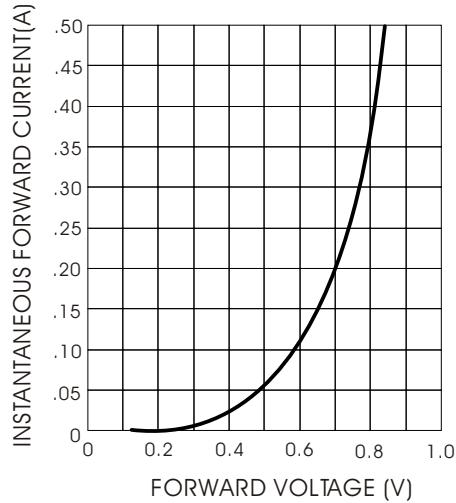


FIG.2-REVERSE CURRENT

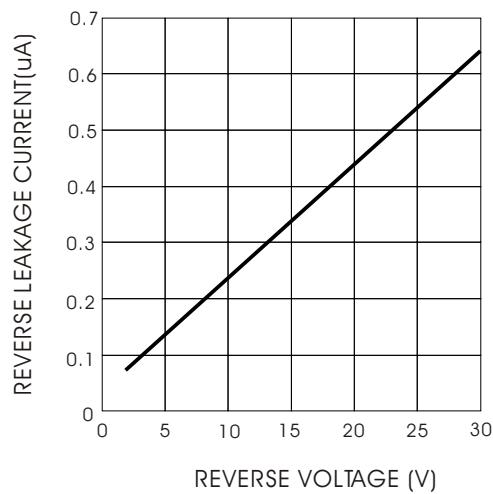


FIG.3-JUNCTION CAPACITANCE

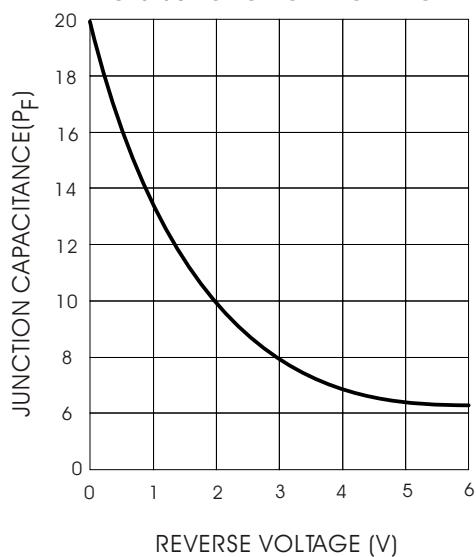


FIG.4-DETECTION EFFICIENCY MEASUREMENT CIRCUIT

